

# **PROBLEM SUMMARY**

Sample Rating Trend

**VISCOSITY** 

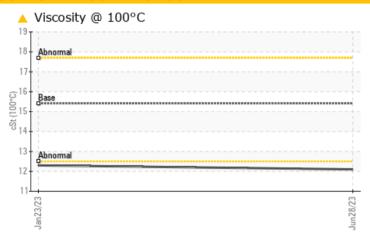




Component **Diesel Engine** 

PETRO CANADA DURON SHP 15W40 (--- GAL)

## **COMPONENT CONDITION SUMMARY**



#### RECOMMENDATION

Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status ATTENTION **ATTENTION** Visc @ 100°C cSt ASTM D445 15.4 **12.1** <u>12.3</u>

Customer Id: GFL641 Sample No.: GFL0055941 **Lab Number:** 05888752 Test Package: FLEET To manage this report scan the QR code

To discuss the diagnosis or test data:

Don Baldridge +1 don.b505@comcast.net

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

## **RECOMMENDED ACTIONS**

There are no recommended actions for this sample.

## HISTORICAL DIAGNOSIS

23 Jan 2023 Diag: Don Baldridge

FUEL

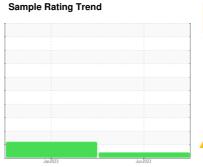


Resample at the next service interval to monitor. All component wear rates are normal. Light fuel dilution occurring. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.





# **OIL ANALYSIS REPORT**





# WL0265 Component

**Diesel Engine** 

PETRO CANADA DURON SHP 15W40 (--- GAL)

## DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

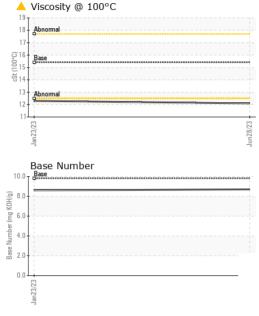
## Fluid Condition

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

GAL)			Jan 2023	Jun2023		
SAMPLE INFOR	MATION	method	limit/base	current	history 1	history 2
Sample Number		Client Info		GFL0055941	GFL0067547	
Sample Date		Client Info		28 Jun 2023	23 Jan 2023	
Machine Age	hrs	Client Info		0	0	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	N/A	
Sample Status				ATTENTION	ATTENTION	
CONTAMINAT	ION	method	limit/base	current	history 1	history 2
Fuel		WC Method	>5	<1.0	4.1	
Glycol		WC Method		NEG	NEG	
WEAR METAL	S	method	limit/base	current	history 1	history 2
Iron		ASTM D5185m	>100	30	22	
Chromium	ppm	ASTM D5185m	>20	<1	<1	
Nickel	ppm	ASTM D5185m	>4	0	0	
	ppm		>4	√ <1		
Titanium	ppm	ASTM D5185m	0		0	
Silver	ppm	ASTM D5185m	>3	0	0	
Aluminum	ppm	ASTM D5185m	>20	2	2	
Lead	ppm	ASTM D5185m	>40	0	0	
Copper	ppm	ASTM D5185m	>330	2	1	
Tin	ppm	ASTM D5185m	>15	<1	<1	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	0	41	43	
Barium	ppm	ASTM D5185m	0	2	0	
Molybdenum	ppm	ASTM D5185m	60	43	41	
Manganese	ppm	ASTM D5185m	0	<1	<1	
Magnesium	ppm	ASTM D5185m	1010	412	453	
Calcium	ppm	ASTM D5185m	1070	1641	1611	
Phosphorus	ppm	ASTM D5185m	1150	665	626	
Zinc	ppm	ASTM D5185m	1270	857	875	
Sulfur	ppm	ASTM D5185m	2060	2669	2890	
CONTAMINAN	TS	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>25	6	6	
Sodium	ppm	ASTM D5185m		0	2	
Potassium	ppm	ASTM D5185m	>20	2	0	
INFRA-RED		method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844	>3	0.1	0.5	
Nitration	Abs/cm	*ASTM D7624	>20	6.7	12.2	
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.9	21.6	
FLUID DEGRAI	DATION	method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.7	21.9	
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.7	8.6	
(211)	99				0.0	



## **OIL ANALYSIS REPORT**



VISUAL		method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	
ELLIID DRODE	DTIEC	method	limit/hase	current	history 1	history 2

**12.1** 

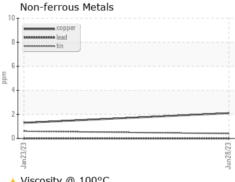
**12.3** 

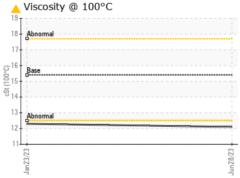
Visc @	100°C
GRA	PHS

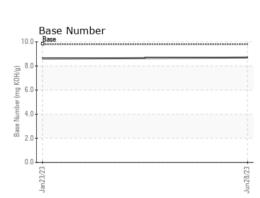
Ferrous Alloys

cSt

ASTM D445 15.4









Certificate L2367

Laboratory Sample No. Lab Number Test Package : FLEET

Unique Number : 10539235

: GFL0055941 : 05888752

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 03 Jul 2023 Diagnosed : 05 Jul 2023 Diagnostician : Don Baldridge

1241 KING SETTLEMENT RD ALPENA, MI US 49707 Contact: DYLAN TOLAN

dylan.tolan@gflenv.com T: (989)854-7203

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)